

1 Amendments to the Claims:

2 This listing of claims will replace all prior versions, and
3 listings, of claims in the application using (Original) (Currently
4 Amended) (New) (Canceled) (Previously Presented) nomenclature, as
5 recited in the below listing of claims.

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7 1. (Original) A hinge for positioning a left panel and a right
8 panel, the hinge comprising,

9 an inflatable bladder for encapsulating an inflation material,
10 a top film extending between the left and right panels and
11 encapsulating a curing resin, and

12 a bottom film extending between the left and right panels, the
13 top film and bottom film are circumferentially disposed about the
14 bladder, the top film having a top circumferential length, the
15 bottom film having a bottom circumferential length, the top and
16 bottom circumferential lengths for angularly positioning the left
17 and right panels.

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19 2. (Original) The hinge of claim 1 further comprising,

20 a flex circuit extending from the left panel and around the
21 bladder for electrically routing power from the left panel.

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24 3. (Original) The hinge of claim 1 wherein,

25 the inflation material is a sublimation powder disposed in the
26 bladder for inflating the bladder.

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1 4. (Original) The hinge of claim 1 further comprising,
2 a reflective coating disposed on the bladder for reflective UV
3 light into the curing resin.

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5 5. (Original) The hinge of claim 1 further comprising,
6 a left frame for securing the left panel to the top film and to
7 the bottom film and to the bladder, and
8 a right frame for securing the right panel to the top film and
9 to the bottom film and to the bladder.

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11 6. (Original) The hinge of claim 1 further comprising,
12 a left frame for supporting the left panel to the top film and
13 to the bottom film and to the bladder,
14 a left adhesive layer for securing the left frame to the left
15 panel and to the top film and to the bottom film and to the
16 bladder,
17 a right frame for supporting the right panel to the top film and
18 to the bottom film and to the bladder, and
19 a right adhesive layer for securing the right frame to the right
20 panel and to the top film and to the bottom film and to the
21 bladder.

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1 7. (Original) The hinge of claim 1 further comprising,
2 a flex circuit extending from the left panel and around the
3 bladder for electrically routing power from the left panel,
4 a plurality of ground pads disposed on the top and bottom films,
5 a plurality of extensions comprising conductive traces extending
6 from the flex circuit to the plurality of ground pads,
7 respectively, for distributively grounding the hinge.

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10 8. (Original) The hinge of claim 1 further comprising,
11 a flex circuit extending from the left panel and around the
12 bladder for electrically routing power from the left panel,
13 a plurality of ground pads disposed on the top and bottom films
14 and disposed on and under the left and right panels, and
15 a plurality of extensions comprising conductive traces extending
16 from the flex circuit to the plurality of ground pads,
17 respectively, for grounding the hinge.

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19 9. (Original) The hinge of claim 1 further comprising,
20 a flex circuit extending from the left panel and around the
21 bladder for electrically routing power from the left panel, the
22 left panel being a solar cell panel comprising a silver contact and
23 a thin film solar cell, the flex circuit comprising a conductor
24 trace connected the silver contact for routing power from the left
25 panel and around the bladder.

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1 10. (Currently Amended) The hinge of claim 1 wherein the curing
2 resin is cured by exposure to UV light, the hinge further
3 comprising,

4 a coating disposed over the top and bottom films for passing UV
5 light and for conducting static electrical charge, the coating
6 serving to discharge static electrical charge accumulating on the
7 coating.

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10 11. (Currently Amended) The hinge of claim 1 wherein the curing
11 resin is cured by exposure to UV light, the hinge further
12 comprising,

13 a transparent coating disposed over the hinge for passing UV
14 light and for conducting static electrical charge, the coating
15 comprising indium tin oxide and magnesium fluoride, the transparent
16 coating serving to discharge static electrical charge accumulating
17 on the transparent coating.

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19 20 12. (Currently Amended) The hinge of claim 1 wherein the left panel
is a solar cell panel for providing power, the hinge further
21 comprising,

22 a flex circuit extending from the left panel and around the
23 bladder and comprising a trace conductor for electrically routing
24 power from the left panel having an electrical contact and around
25 the bladder, and

26 a wrap around contact for electrically connecting the electrical
27 contact and the trace conductor.

1 13. (Currently Amended) A hinge for positioning a left panel and a
2 right panel, the hinge comprising,

3 a top film for encapsulating a curing resin, the curing resin
4 cured by exposure to UV light, the top film having a top
5 circumferential length for defining the a position between the left
6 and right panels, and

7 a coating disposed over the top film for passing the UV light
8 for curing the curing resin and for static discharge protection of
9 the film, the coating serving to discharge static electrical charge
10 accumulating on the coating.

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12 14. (Currently Amended) The hinge of claim 13, the hinge further
13 comprising,

14 a bladder, and

15 a bottom film, the top film and bottom films are
16 circumferentially disposed about the bladder, the bottom film
17 having a bottom circumferential length, the top and bottom
18 circumferential length defining the position between the left and
19 right panels,

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21 15. (Original) The hinge of claim 13, wherein,

22 the coating comprises indium tin oxide and magnesium fluoride.

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1 16. (Currently Amended) A hinge for positioning a left panel and a
2 right panel, the hinge comprising,
3 a curing resin,
4 a top film coupled to the left and right panels and for
5 encapsulating the curing resin, the curing resin being cured by
6 exposure to UV light, the top film having a top circumferential
7 length for defining ~~the an~~ angular position between the left and
8 right panels.

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